

Institutional change and the uses and limits of path dependency: the case of German finance

Deeg, Richard

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**Institutional Change
and the Uses and Limits of Path Dependency:
The Case of German Finance**

Richard Deeg

01 / 6

Max-Planck-Institut für Gesellschaftsforschung
Paulstrasse 3
50676 Köln
Germany

Telephone 0221 / 2767 -0
Fax 0221 / 2767 -555
E-Mail info@mpi-fg-koeln.mpg.de
Website www.mpi-fg-koeln.mpg.de

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Abstract

How can we determine when an existing institutional path or trajectory is ending and being replaced with a new one? How does such a process take place? How can we distinguish between institutional innovation within an existing trajectory and a switchover to a new trajectory or path? This paper explores these questions by examining the pattern of institutional change in the German financial system. The paper advances four theoretical claims: First, that endogenous developments can disrupt an institutional path and lead to a new one. Second, that an event sequence involving a move to a new institutional path may not follow from a contingent event yet may nonetheless be marked by increasing returns processes. Third, that increasing returns in politics are not automatic and must be cultivated by actors in order to be realized. Finally, that the concept of path is still in need of a measurable conceptualization before any further advances in path dependent arguments can be made.

Zusammenfassung

Wie lässt sich bestimmen, wann ein bestehender institutioneller Pfad endet und durch einen neuen ersetzt wird? Wie vollzieht sich ein solcher Prozess? Wie kann zwischen einer institutionellen Innovation im Rahmen einer bestehenden Trajektorie und dem Wechsel zu einem neuen Pfad unterschieden werden? Zur Beantwortung dieser Fragen werden die Muster des institutionellen Wandels im deutschen Finanzsystem untersucht. Dabei werden vier Thesen aufgestellt. Erstens: Endogene Entwicklungen können dazu führen, dass ein institutioneller Pfad unterbrochen und durch einen neuen abgelöst wird. Zweitens: Eine Ereignisfolge, die eine Hinwendung zu einem neuen institutionellen Pfad nach sich zieht, muß nicht unbedingt durch ein kontingentes Ereignis ausgelöst werden, kann aber gleichwohl auf positiven Rückkopplungen und wachsenden Skalenerträgen beruhen. Drittens: Solche Skaleneffekte entstehen in der Politik nicht automatisch, sondern müssen von den Akteuren aktiv gefördert und „kultiviert“ werden. Schließlich: Das Konzept der Pfadabhängigkeit bedarf nach wie vor einer messbaren Konzeptualisierung, bevor weiterführende Thesen im Rahmen dieses Ansatzes formuliert werden können.

Contents

1	Introduction	5
2	Institutional Stability and Change	8
3	The Existing Path of the German Financial System	15
4	The Change to a New Path	19
4.1	A Brief Empirical History	21
4.2	The Role of Self-Reinforcing Mechanisms	29
5	Meet the New Path – Same as the Old Path?	34
6	References	37

1 Introduction

Since the early 1980s, the Germans have repeatedly agonized over their presumed lack of cutting-edge, high-tech industries and declining international competitiveness. For many Germans, Silicon Valley became the symbol of American economic renewal and the mirror of their own technological deficiencies. Despite many years of robust growth over the past two decades, Germans continue to believe they lack the necessary entrepreneurial spirit, venture capital, and market flexibility. Yet despite current problems of high unemployment, there are many unmistakably profound changes in Germany which suggest that it is finally imitating with success many of the institutions associated with American economic prosperity. A growing number of internationally competitive and innovative information-technology firms can be found in Germany, perhaps best symbolized by the global success of the software firm SAP. A stunning and very recent wave of initial public offerings by technology oriented firms on a new high-growth stock exchange looks like a German version of America's NASDAQ. Numerous large German firms have made major international acquisitions, listed themselves on the NYSE, and are focusing on returning higher share prices to shareholders – and Germans now seem to be actually interested in buying shares! Propelled by the conviction among a growing number of politicians and business leaders that the German model is fit for the trash bin of history,¹ years of myriad economic policy reforms reached a new crescendo with recent and profound corporate tax reforms. Anyone casually following the headlines in the German media (not to mention *The Economist*!) would easily get the impression that a capitalist revolution is underway in Germany. All of this leads to the question of whether, after long years of fretting and tinkering, the “over-regulated” German economy has finally sprung its traps?

Beyond this empirical question the German case gives rise to a profound set of theoretical questions about institutional change: Has there been a fundamental institutional transformation in Germany, i.e., has Germany moved onto a new institutional trajectory or path? If so, how do we explain this? How, generally, can we determine when an existing institutional path is ending and being replaced with a new one? How does such a process take place? How can we distinguish between institutional innovation within an existing path and a switchover to a new path?

I would like to thank Andreas Broscheid, Michel Goyer, Hans-Willy Hohn, Susanne Lütz, Janice Bially Mattern, Jonas Pontusson, and Herman Schwartz for their many insightful and probing comments and questions.

1 In January 2000, Finance Minister Eichel declared “Deutschland AG” (Germany, Inc.) a discontinued model (Jürgens et al. 2000: 29).

In this paper I will present some tentative answers to these questions and illustrate my theoretical arguments by reference to the pattern of institutional change in the German financial system. I will draw on recent theoretical work on path dependency and institutional change to identify the mechanisms of institutional reproduction and the mechanisms of institutional change or innovation in the German case. The case suggests that path dependency or self-reinforcing (positive feedback) mechanisms can be used to help explain the observed pattern of *simultaneous* institutional stability or reproduction and institutional innovation within the financial system. Yet the case also suggests that path dependency and current analytical concepts and theories of institutional change do not fully account for the pattern of change, thus pointing to areas for further theoretical development and empirical research.

The empirical case study focuses on the financial sector because the German financial sector is widely accepted as a cornerstone of Germanys political economic model – *Modell Deutschland*.² In other words, the financial system occupies a central position within the mutually-reinforcing institutional complex of the German economy.³ Thus fundamental changes in the German financial system have direct and significant consequences for the non-financial sector and, by extension, the German model as a whole. However, in this paper I will focus on the financial system and not attempt to generate an account of change in the entire German economy.⁴ Second, studying the financial sector allows us to see how economic and political actors respond jointly to incentives for change in a given institution (or institutional complex). This is so because much of the institutional change (and reproduction) in the financial sector is predicated on coordinated responses by both kinds of actors, notably (but not exclusively) in the form of government regulation. Thus, this is a study of change in both economic and political institutions.

2 In most capitalist economies banks serve an important “infrastructure” function, but in relative terms German banks are widely regarded as having an even greater institutional or infrastructural role.

3 (Hall/Soskice 2001). The ‘national varieties of capitalism’ literature rest on the premise that national economic models are constituted by a broad set of complementary and mutually-reinforcing institutions such as labor market, financial, training, and innovation. While I believe that there is a fundamental element of correctness in this argument, the case explored in this paper suggests (as have some others, e.g., Regini 2000) that the coupling among these institutions may be looser than is commonly argued, i.e., change in one institution may have less effect on the others than is presumed. This opens the door to the possibility that the German financial system can change to a new institutional path without the same necessarily being true of the entire German political economic model (or other subsets, e.g., the industrial relations system, of that model).

4 For an example of a comprehensive assessment see Czada (2001).

I will argue that the German financial system has initiated a new path or trajectory. But this new path does not represent a radical break from the past, yet neither is it simply rapid evolution or innovation within the old path. Rather, it is a new path characterized by a hybridization process (not convergence) in which many of the institutions of the old path continue as before, some old institutions are transformed to new purposes, and new institutions are introduced. Yet I will argue that this represents a new path because the “logic” of the financial system has significantly changed, i.e., the incentive structures for key actors and patterns of strategic interaction among them within the sector have changed significantly.

This particular conception of a path switch-over may diverge from that commonly assumed by other theorists of path dependence. But if one were to take the position that a new path can only be constituted by complete, radical change – as most theorists apparently do – then the concept is of rather limited use. If one were to take the position that a switch to a new path can only result from what North calls discontinuous change, i.e., wars, revolutions, conquest, or natural disasters, then we would find relatively few cases to study.⁵ For example, if ever there were a moment for discontinuous change, World War II would certainly qualify as such.⁶ Yet the similarities between the pre- and postwar German financial systems are strikingly high. This means either that the German financial system is so robust as to be imperturbable – and thus an exceptional case – or it means that the kind of discontinuous change foreseen by some advocates of path dependency as necessary for a change to a new path rarely happens. If the latter is indeed true, in my view it can only lead to one of two conclusions: The first is that, for all practical purposes, there is no true path change, i.e. everything just evolves along the same path, and hence the concept of a path is tautological. The second is that the switch to a new path is always (or nearly so) an evolutionary process. I will, as already suggested, argue the second position. While the German case might not provide a conclusive answer to the question of when an existing path is replaced by a new one, it will allow us to get inside “the belly of the beast” and explore the dynamics of an uncommon situation in which the replacement of one path by a new one appears to be underway.

5 North argues that discontinuous change is seldom as radical as it appears on the surface. This is mostly because informal constraints (norms, etc.) do not change in step with formal ones. The resulting tension between formal and informal constraints eventually leads to a new institutional equilibrium that is much less revolutionary (1990: 90–91).

6 German reunification in 1990 is a more recent example, yet this led to no change in the (West) German path. The East was brought onto a new path, but through a most unusual process in which a “victor” imposed a new system. Though this is a rich empirical case, I will not discuss it in this paper because it had little relevance to the path changes I focus upon and others have explored it in detail (for example, Jacoby 2000).

2 Institutional Stability and Change

It is neither necessary nor feasible to undertake here a systematic review of recent work in institutionalist theory.⁷ Rather, I will review some key issues and debates about which the German case can, in my view, yield some new insights. I will take as my starting point the central and powerful concept of path dependence. In a flurry of recent work Paul Pierson (2000a, 2000b, 2000c, 2000d) has elaborated an enticing theory of path dependence because it is a more complete and precise one than is typically found in social science. For this reason it makes an excellent basis upon which to start this analysis.

Pierson (2000a: 74–77, 2000b) argues that a path dependent historical or temporal process is one characterized by a self-reinforcing sequence of events. Path dependence constitutes a particular kind of historical process with a number of distinctive characteristics.⁸ First, *when* a particular event happens in a sequence is very important, because “small” events early in a sequence can have disproportionately large effects on later events. Second, during the early stages of a sequence – what can be understood as the critical juncture – things are relatively open or permissive but get more restrictive as one moves down a path. Third, as one moves further down the path change becomes ‘bounded,’ i.e.,

... previously viable options may be foreclosed in the aftermath of a sustained period of positive feedback, and that cumulative commitments on the existing path will often make change difficult and will condition the form in which new branchings will occur. (Pierson 2000a: 76)

Path dependence thus involves three phases: the first is the critical juncture in which events trigger a move toward a particular path out of at least two possibilities; the second is the period of reproduction, that is, the period in which positive feedback mechanisms (discussed next) reinforce the movement along one path; and finally, the path comes to an end when new events dislodge the long-lasting equilibrium. Thus, for Pierson every path begins and ends with a critical juncture, or what has also been frequently referred to as a punctuated equilibrium, marked by specific triggering events. These events may be just as likely to be “small” as “big.”

Mahoney, arguing much along the lines of Pierson, takes this point a step further in arguing

7 For good reviews see Thelen (1999), Mahoney (2000), Pierson (2000b), Clemens/Cook (1999).

8 To emphasize the point, Pierson and others take great pains to distinguish path dependency as only one form of causal historical process.

... that path dependence characterizes specifically those historical sequences in which contingent events set into motion institutional patterns or event chains that have deterministic properties. The identification of path dependence therefore involves both tracing a given outcome back to a particular set of historical events, and showing how these events are themselves contingent occurrences that cannot be explained on the basis of prior historical conditions. (Mahoney 2000: 507–8)

Mahoney thus specifies more clearly than Pierson the properties of the ‘early events’ in a historical sequence; namely, these events must be *contingent* in that they cannot be explained by prior events or “initial conditions” (otherwise one could not logically be at the beginning of the path). This does not mean that events are completely random or without antecedent causes, but they are either events too specific to be explained by prevailing theories, such as the assassination of a political leader or the specific choices of an individual, or they are large random events like natural disasters or market crashes (Mahoney 2000: 513). “Analysts may also treat an outcome as contingent if it contradicts the predictions of a particular theoretical framework specifically designed to account for this outcome” (Mahoney 2000: 514). The contingent nature of initial events – the critical juncture – is a necessary and logical element of Pierson and Mahoney’s conception of path dependency, but I will suggest in my analysis that this condition is too restrictive theoretically and empirically difficult to sustain.⁹

One of the most important contributions of Pierson to recent institutionalist debates is his effort to specify mechanisms of institutional reproduction, or, put simply, what keeps things moving along the same path. Borrowing from economics, Pierson argues that a specific path is promoted via positive feedback mechanisms or the realization of *increasing returns* to moving along this path (Pierson 2000a, 2000b).¹⁰ A variety of feedback mechanisms could be operative in the reproduction of a given path: One possibility is ‘large set-up or initial costs’; once actors make a large investment in a particular institution they have an incentive to continue it in order to recover those costs. Another possibility is ‘learning effects,’ i.e., over time actors operating within the institutions that define a particular path become more adept and knowledgeable and use this to enhance the efficiency of the institutions. A third mechanism is ‘coordination effects’ in which the benefits accruing to one set of actors from engaging in a particular activity (i.e.,

9 Schwartz (2001) refers to the Pierson-Mahoney conception of path dependence as ‘codified path dependence’ to indicate their specification and reliance on self-reinforcing mechanisms and increasing returns.

10 Mahoney also argues that path dependence can take an alternative form of sequentiality. There can also be non-reinforcing or reactive event sequences. In this case, early events give rise to reactive or backlash events that transform or even reverse early events (Mahoney 2000: 526). Pierson also acknowledges this form of path dependency, but is more skeptical as to whether it actually constitutes a genuinely distinct alternative (Pierson 2000a: 83–86).

following a certain path) grow when other actors adapt their behavior to promote that same path. A related but distinct mechanism to coordination effects is ‘adaptive expectations.’ This mechanism is operative when actors *expect* other actors to adopt a particular option (follow a particular path) so the first set of actors adopts that option in order not to be left behind. Mahoney lumps the above four mechanisms into a ‘utilitarian’ explanation of institutional reproduction (516–518). Underlying these mechanisms is the assumption that actors choose particular institutions and choose to reproduce them so long as they see it in their interest to do so, and this determination is based on a cost-benefit analysis of alternative choices.¹¹ In contrast to Pierson (2000b), however, Mahoney sees these mechanisms as having little relevance outside of the marketplace, i.e., they do not explain much in politics. This leads Mahoney to other mechanisms that Pierson also cites as possibilities; namely, the exercise of ‘political authority’ or ‘power’ in favor of a particular path which can induce further movement along it as powerful actors can affect institutions or rules in a manner that reinforces their power (Pierson 2000a: 77). ‘Legitimacy’ can also function as a positive feedback mechanism, since often the growing acceptance among actors of something as legitimate or appropriate encourages others to also accept it as such.¹²

Important for my analysis in this paper is also the argument – made by Pierson drawing on North – that it is not only single institutions that are subject to positive feedback effects, “but configurations of complementary institutions in which the performance of each is affected by the existence of others” (Pierson 2000a: 78). The complementarity of a set of institutions can thus generate high levels of increasing returns because the effectiveness of each is dependent upon the existence and functioning of the others. Financial systems fit this description since they are composed of a broader institutional complex involving, for example, banks, insurance firms, stock exchanges, corporate governance regimes, accounting regulations, tax laws, etc.

Through an examination of institutional change in the German financial system I will advance four theoretical claims. The first is that, contrary to the theory of path dependence which asserts that only exogenous change can move actors off a

11 In this sense both Pierson and Mahoney are consistent with rational choice theory, though neither one advocates a strictly rational choice perspective.

12 On power and legitimacy as sources of institutional reproduction see Mahoney (2000), Clemens / Cook (1999). Mahoney also discusses functional explanations of institutional reproduction. In the weak version of functionalism the consequences of the institution explain why it is reproduced; in the strong version, the consequences of the institution for an overall system explain its reproduction (2000: 519–520). Pierson is skeptical as to whether functionalism represents a distinct type of self-reinforcing mechanism (2000a: 77). For an extensive historical institutionalist critique of functionalist explanation see Pierson (2000c).

current path, an exogenous shock is *not* the only way a path gets disrupted, i.e., that a process of fundamental institutional change is initiated. Endogenous sources of change include actions undertaken by actors within the institution or institutional system – or by events or processes – that result directly from the mechanisms of path reproduction.¹³ In the German case the initial motor for change is ‘decreasing returns’ to key actors within the existing path of the financial system. The reasons for decreasing returns are initially endogenous. For example, during the 1970s large firms increased their financial autonomy from the big banks by building significant financial reserves to finance their operations. This, in turn, touched off a search by the big banks for new sources of business which led to a broader process of changing the financial system as a whole. Exogenous factors, notably the growing internationalization of financial markets and European market integration, do eventually become quite significant sources of change but only after endogenous developments initiate a process of institutional change that ultimately cumulates into a new path. Thus the internal dynamics of the system led to developments which altered the interests of key / central actors (not marginal ones) who initiated a series of institutional changes designed to serve their interests. Ultimately, a mixture of endogenous and exogenous pressures led to a series of path-changing initiatives. To put a finer and more piqued theoretical point on it, this case suggests that a ‘critical juncture’ can emerge (at least partly) out of normal processes of change inside a path (see also Schwartz 2001: 3, 11–13).

This leads to a second theoretical claim; namely, that an event sequence involving a move to a new path may not necessarily have to follow from a contingent event yet may nonetheless be marked by path dependent – increasing returns – processes.¹⁴ The above two theoretical claims also converge with Thelen (1999; forth-

13 I am indebted to Andreas Broscheid for suggesting a definition along this line. With this definition it becomes essential to identify the exact mechanisms of path reproduction and to show how their gradual (and “natural”) evolution over time can lead to changes which undermine or alter these very mechanisms and thereby upset the institutional equilibrium (path). This, in turn, induces actors to seek new institutional changes that will either restore the equilibrium (on-path change) or move to a new one (off-path). Ultimately, however, the distinction between exogenous and endogenous factors becomes fuzzy, because no institution or institutional system in a modern political economy exists in complete isolation from others. Thus the latter will always have some effect on the development of the institution in question.

14 North makes a powerful argument that institutional change is almost always evolutionary and the result of thousands of accumulated marginal changes in formal and informal constraints (1991: 89, 100); hence the idea that one event, especially a small one, can so radically alter the path of institutional change / evolution lacks persuasive force. Schwartz (2001: 3) makes a similar point that the impact of seemingly small events usually depends on much bigger structural conditions.

coming) who argues that path dependency makes too fine a distinction between processes of institutional change and institutional stability. Her point is that institutions almost continuously evolve and quite often, over time, this evolution, while path dependent in the sense that it accommodates the logic of the existing system, ceases to push developments along the same track as suggested by increasing returns (path dependent) arguments (Thelen forthcoming: 28). As an alternative, Thelen suggests we analyze institutional change by identifying mechanisms of institutional reproduction or stability, such as increasing returns mechanisms and mechanisms of change such as institutional layering or institutional conversion. Moreover, mechanisms of reproduction and change are at work at the same time (Thelen forthcoming: 26; also Schwartz 2001: 11, makes a similar argument).

I seek to build upon Thelen's critique in two ways: First, Thelen does not distinguish clearly between evolutionary change that alters the "overall trajectory of policy and politics" – which she calls 'bounded innovation' – and change that represents the replacement of one path by another. In not doing so, she leaves herself vulnerable to the counter-argument by path dependency proponents that she is describing nothing more than extensive but still path dependent change. Below I will address this point by offering a general definition of what constitutes a path, as well as a definition of path change. The second contribution is to show that increasing returns mechanisms can also be mechanisms of change, as much as reproduction.

This leads to the third theoretical claim I wish to advance; that increasing returns must often (or perhaps normally) be cultivated by actors, i.e., they do not happen automatically.¹⁵ While this point is not necessarily inconsistent with Pierson, Ma-

15 Schwartz (2001: 8–11) also points out that increasing returns may reach a point of exhaustion and then other mechanisms of institutional reproduction (i.e., maintaining the path) must come into play. If they do not, then we may see a path change without any obvious exogenous cause. Schwartz goes on to argue quite strongly that rather than enjoying increasing returns, social and political organizations are generally confronted with the problem of staving off decreasing returns. He writes: "The key role that state-enforced monopolies of representation or delegated enforcement powers play in organizational maintenance is a clear signal that organizations do not experience increasing returns. Without coercion, organizational 'paths' are not self-sustaining and require constant struggle to maintain." (ibid.: 9) For Schwartz, power, not increasing returns, stabilizes paths (ibid.: 11). Actors are simply trying to hold their place until they are forced by decreasing returns to adopt new institutions which help them overcome those limiting factors (ibid.: 16). While Schwartz no doubt points correctly to the real existence of decreasing returns effects, I do not think he makes a convincing case that increasing returns effects are negligible. Moreover, Schwartz applies his argument about decreasing returns to individual organizations; it is not clear how well this would apply to other kinds of institutions

honey, and Thelen, it is a point that has not received specific attention.¹⁶ Cultivation takes the form of mobilization in the political arena on behalf of policy or regulatory change. It also takes the form of organizing collective action, often in the form of coalition building. This is the point where power and ideas or ideologies enter crucially into the institutional change process. If institutional change in the financial system were simply a result of actors finding the most efficient (in market terms) institutional solution, then a simple functionalist explanation would suffice. But if, for instance, we take the fundamental choice confronting actors in the German financial system between adapting the existing bank-based financial system or converting to a market-based system, the most efficient choice is not obvious. In the abstract neither type of financial system is clearly superior to the other in terms of economic efficiency, and the outcome or consequence of choosing one over the other is very uncertain: Sticking with the old could be slow death while choosing the new may not lead to a better outcome in terms of growth/efficiency. Thus actors deploy power or ideology (or both) to promote their favored outcomes. This is neither a novel nor profound claim, but one worth remembering at this point. Moreover, North (1991: 36–37, 66–68) argues that cultural or informal constraints are a big reason for path dependence. So if a path is really changing, then this should be marked by changes in informal as well as formal institutions.

We must also recognize that self-reinforcing processes can be fostered by the feedback effects from unintended consequences.¹⁷ In other words, the pursuit of specific institutional changes by particular actors may not result in their intended outcomes, but unintended effects may nonetheless reinforce the move toward a new path. The bigger point is that the move to a new path (and the particular events along the way) may well not be one of completely conscious design by a given actor or set of actors.

One of the glaring (and surprising) gaps in this debate is that no one has attempted to explicitly define, let alone theorize, when one is no longer on the old path, i.e., how do we know when change is ‘bounded change’ within the old

such as regulatory frameworks or norms and expectations producing regularized expectations and patterns of interaction among organizations/actors, let alone to the possibility that increasing returns effects may be generated by the very interaction among multiple organizations or institutions.

16 On the other hand, Pierson and Mahoney emphasize the deterministic nature of event chains in path dependent processes, implying that agency plays a secondary role. North argues as well that path dependence does not mean automaticity of development along any given trajectory, i.e., there are many choice points along the way (1991: 98), and at each of these actors will have to mobilize on behalf of their preferred choice.

17 I am indebted to Michel Goyer for suggesting this point.

path, or when is it a new path?¹⁸ Answering this question could go a long way toward resolving the central issue of debate. Indeed, it seems rather obvious that if we cannot make a clear distinction between change within a path and change to a new path, then the concept itself is rather useless, and there has been a lot of barking up wrong trees. Moving forward on this issue starts with a definition of institutions, a working definition of a path, and a “measurable” conceptualization of path change. I will follow Hall (1986: 19) in assuming that institutions are “the formal rules, compliance procedures, and standard operating practices that structure the relationship between individuals in various units of the polity and economy.”¹⁹ An institutional path exhibits an identifiable ‘logic,’ i.e., a distinct pattern of constraints and incentives (institutions) generate typical *strategies*, *routine* approaches to problems and *shared decision rules* that produce predictable patterns of behavior by actors.²⁰ When actors are confronted with new situations, they will resort to these strategies, routines, and decision rules. Adaptations (i.e. institutional changes) to new situations that preserve these elements of the paths’ preexisting logic constitute on-path or ‘bounded innovation.’

Following North’s idea that institutions can be viewed as the rules of the game and that there is a hierarchy of rules with increasing difficulty of change as one ascends, a new path will also be characterized by changes in higher-order institutions or rules (chapters 9–11). This includes both formal institutions – key laws, regulations and the like – that constrain actors’ behavior and informal institutions. Indeed, if North is correct, one is likely to have a harder time demonstrating the crucial changes in informal (cultural or normative) constraints that mark truly significant change. Adaptations of formal and informal institutions which together lead to the creation of a new logic constitute off-path institutional change, i.e., change to a new path.²¹

18 Schwartz (1991: 10) raises exactly this question, but attempts no answer.

19 North (1991: 3) provides a compatible but more expansive definition: “Institutions are the rules of the game in a society or, more formally, are the human devised constraints that shape human interaction. In consequence, they structure incentives in human exchange, whether political, social, or economic.” Institutions include formal and informal (cultural) constraints.

20 For this conception of institutional logic I am drawing on Zysman (1994). It is worth noting that all institutions may be said to have a path, but not all processes of institutional change are path dependent ones.

21 A switch from one path to another might also be identified by the introduction of different mechanisms of institutional reproduction (see Thelen 2000: 108).

3 The Existing Path of the German Financial System

If the German financial system is not unambiguously sub-optimal, why do they change it? How do they manage to do this if there are strong institutional lock-in and positive feedback effects that ought to keep Germans on the same path, especially when it is not clear that the alternative is better? My answer starts with the assertion that key actors come to see their interests as diverging from the existing path. Their interests change first as a result of endogenous developments in the path and, later, exogenous changes. The movement to a new path in Germany may have begun small, in some sense, but it cannot be traced back to a single initial event or a single initial conjuncture of two historical event sequences. Rather, it is a cumulative result achieved through an evolutionary process – *mostly* intended by actors – that is eventually driven forward by increasing returns or self-reinforcing mechanisms in what can be viewed as a critical juncture, i.e., the mid-1980s to late 1990s. Paradoxically, it turns out that self-reinforcing mechanisms can be observed at work in simultaneously preserving the old path and promoting a new one. This is possible because the old path “bifurcates” in a sense; part of the path (mostly comprised of smaller banks and firms) continues to evolve along the old trajectory – that is, on-path change – while another portion (mostly involving large banks and firms) develops a significantly new institutional dynamic or path. Yet both parts are inseparable pieces of the German financial system and the evolution of each is conditioned by that of the other.

From the beginning of the industrial era, the German banking industry has been characterized by three major banking groups or sectors.²² First are the commercial banks, which include the well-known “Big” banks. Historically, these banks have been close, long-term partners to many German firms. The second major banking sector is constituted by more than 500 local, communally-controlled public savings banks. Historically these banks have focused on consumer retail banking, public infrastructure and communal finance, mortgage finance, and small business lending. The sector also consists of 13 regional banks (*Landesbanken*). Since the 1960s these banks have developed into large, full-scale universal banks (minus retail operations).²³ The third and final sector is constituted by the more than 2,000 cooperative banks. These banks are mutually owned and have historically focused on small business and agricultural loans, though in the postwar period they have become primarily retail banks.

22 Much of the empirical material discussed in this section is drawn from Deeg (1999).

23 The liabilities of these banks are backed by a public guarantee. This guarantee, however, will be phased out over the next several years as a result of pressure from the European Union.

It virtually goes without saying that the banking industry is widely recognized as a key ingredient of German industrial success (Shonfield 1965; Zysman 1983). Much studied and hotly debated is the historically close relationship between large banks and firms.²⁴ This relationship rests on several institutions and patterns: First, in comparative perspective German firms have not relied much on equity markets for external finance, instead relying on bank loans. Second, large banks frequently have substantial equity stakes in large firms, giving them a voice in firm management. Moreover, ownership in large German firms tends to be concentrated in the hands of a few long-term shareholders, primarily families, other large nonfinancial firms, and, to a lesser extent, financial firms. And third, bank representatives have historically sat on a wide range of corporate supervisory boards, placing them in an unparalleled position to monitor and, occasionally, influence management.²⁵ It has frequently been argued that this system lends certain comparative advantages to German firms, in particular the ability to rely on “patient capital” and focus on long-term expansion rather than share price maximization (Porter 1992).

Historically, SMEs (small and medium-sized enterprises) have relied on the savings and cooperative banks for external financing, though since the late 1970s the major banks have focused on SME lending as a primary market objective. Relatively few German SMEs are publicly listed companies and have traditionally developed long-term and close relations to one (or perhaps two) Hausbanks. The combination of a strong focus on SMEs by the savings, cooperative, and government development banks has meant that German SMEs have enjoyed far more reliable and lower cost capital than is commonly found in other European countries (Vitols 1995). Since the early 1980s all of the banking groups, and many public agencies, have expanded substantially their service offerings to SMEs to include general management consulting, private equity, technology loans and consulting, and more concentrated export promotion. These institutional innovations, which cannot be fully explored here because of space limitations, represent on-path or bounded innovation of the financial system in response to both endogenous and exogenous factors.

The institutional path of the German system embodies an overall *logic* that has typically been characterized as a negotiated or consensual logic (e.g., Shonfield 1965; Zysman 1983). For example, the key institutions (formal rules) governing

24 While it is increasingly understood that the influence of the major banks over Germany's major corporations has tended to be overestimated (for example, Edwards and Fischer 1994), in comparative perspective, it is undeniable that there has been a much closer relationship between banks and firms in Germany than in the US or UK.

25 Banks also cast a large percentage of votes in many shareholder meetings through the exercise of proxy votes granted them by small investors.

the financial system are developed through a consensual bargaining process involving the three major banking groups, or, more likely, the three associations representing each of them. Because these associations also have the status of public institutions, they are formally committed to the public interest. The *shared decisionmaking* system was therefore a corporatist (consensual) rule-making one within a tight-knit policy community. The state's role in this process was largely to act as mediator and codifier of privately-negotiated agreements (Lütz 2000: 152–55).²⁶ The state also played a key role in establishing the statutory framework to govern extensive self-regulation by industry actors, primarily through their associations.²⁷

A second dimension of the system's logic was the "insider control" in the German system of corporate governance (see also Ziegler 2000). In this system, insiders – generally major shareholders such as large banks, insurance firms, corporations and families – controlled the strategies and decisions of large German firms (relatively free of the influence of stock markets or small shareholders). This tightly linked insider system meant that corporate actors typically responded in some collective fashion to common challenges as well as to challenges or problems facing an individual firm. This system rested on the corporate *strategies* of these insiders. The strategy of large commercial banks, for instance, focused on cultivating industrial development and competitiveness through a system of broadly negotiated industrial change (Zysman 1983). Part of this strategy involved investment in maintaining strong networks (both capital and human) among larger firms and the cultivation of long-term relationships to corporate customers.

A third key dimension of the system's logic is 'group competition' in which the savings and cooperative banks, through various kinds of cooperative strategies within their associational structures, attempted to compete also as a group against the large commercial banks in all segments of financial business. Cooperative and savings banks' strategies also focused on long-term relations to small and medium-sized enterprises founded on long-term loans and retail banking. Because of their self-imposed regional principle, individual banks within these two groups avoided direct competition with other banks within the group. For both of these banking groups, profits, while important, were not considered the primary operative goal: Cooperatives' goal (and a key norm) was to further the

26 When rules affect monetary policy, the Bundesbank is also a key actor.

27 The logic of the German bank-based system is typically viewed as the counterpole of market-based financial systems. In these systems the logic of markets as mechanisms for capital intermediation predominates. This means that competition among actors prevails as the dominant mode of interaction. Firms maintain arms-length relations to financial institutions and instead of the long-term relations of the German system they have deal-based relationships. The state exerts a more authoritative role as rule-setter and watchdog of the market.

interests of their members; savings banks was to serve the financial needs of the general public and communal governments. Thus the logic of the old path was characterized by extensive patterns of consensus and cooperation among actors in rule-making and in the pursuit of their market activities.

As with any complex set of institutions, there are many mechanisms that reinforced this system. One key *mechanism of reproduction* was the increasing returns accruing to the system as a whole due to the complementarity of institutions and organizations. For example, the strong, long-term links between banks and non-financial firms were linked to the specific organizational strategies of each, i.e., reliable sources of long-term finance encouraged firms to develop business strategies with long-term investment horizons. This, in turn, creates an interest on the part of non-financial firms in maintaining the existing financial system. Furthermore, the weakness of equity markets in Germany, importantly (but not only) attributable to a comparatively weak demand for equities by German investors, reinforced the reliance on bank loans as the key source of external finance.²⁸ Relatively strong competition in commercial loan markets and state lending ensured competitively priced loans for firms, especially SMEs, and this encouraged them to continue using bank loans as their primary source of external funds.²⁹ The bankruptcy laws also encouraged bank borrowing over equity issues because they placed lenders in a much better position vis-à-vis financially-distressed firms than they did equity investors (Sauvé / Scheuer 1999: 70–77).

The insider system of corporate governance – based on strong networks and concentrated ownership of most large firms – embodied another key mechanism in the form of coordination gains. Major gains yielded by this system (and a benefit to all participants) include protection from unwanted takeovers, useful information about general industrial developments produced through the mutual monitoring of each other, and the assurance of reward for long-term success of the firm rather than the achievement of short-term financial targets. This insider system also encouraged a stakeholder approach to the management of German corporations, i.e., firms were managed not only in the interest of owners, but also in the interest of other stakeholders such as employees, suppliers and customers, and society at large.

28 While insurance companies invested some of their assets in German equities, a very large portion of their assets were invested in bank-issued bonds. The banks, in turn, used these funds for commercial lending (Vitols 1995).

29 By continental European standards, the German banking market has arguably been the most competitive. But in many market segments the competition was based less on price and more on services.

Another key mechanism of reproduction was the relative parity, or at least a stable distribution, of *power* among the three key banking groups. This meant that no single group could dominate the establishment and change of the rules. The stable distribution rested on the fact that each banking group is economically significant and has powerful allies in the economy (especially in associations representing producer groups) and the political party system. Perhaps even more important, no politician or party can afford to run roughshod over any one of these banking groups. Each of these banking groups rested on independent sources of *legitimacy* and the financial system as a whole enjoyed a very high level of social and political legitimacy. This power distribution stabilized the consensual rule-making process and meant that changes have almost always been made only after extensive negotiation and agreement among the parties.³⁰

4 The Change to a New Path

The process of moving to a new institutional path for the German financial system began endogenously. Key actors within the system, notably the large commercial banks, began to gradually see their interests as diverging from the status quo. They sought to confront their competitiveness problems in the 1970s through market strategies, but they ultimately started to focus on changing the higher level institutions or rules that govern the financial system as a solution to their problems in the marketplace. The internationalization of financial markets – an exogenous force – ultimately comes to be the single most powerful source of pressure for change, but internationalization only really becomes such a force after endogenous developments initiate the movement to a new path or sequence of institutional changes.³¹ Moreover, internationalization in itself does not appear to be a sufficient explanatory variable since other national financial systems – such as Italy's – subjected to this same pressure have changed but not moved onto a new institutional path (see Deeg 2001).

That said, the initial movements in the 1970s and early 1980s toward a new path might not have been consolidated but for the growing impact of internationalization on the interests and preferences of domestic actors. Additionally, I will argue that the period around 1985 / 1986 represents an important historical conjuncture

30 There were, of course, also huge sunk costs (both capital and human) in the existing system which helped sustain it as well.

31 Internationalization is treated as an exogenous factor because German economic and political actors did little to promote it during the 1980s, i.e., they were responding to changes they did little to bring about (see Deeg / Lütz 2000).

between the historical event sequences of domestic institutional changes and internationalization. The initiation of the Single Market process at this time really becomes the vehicle through which the internationalization of financial markets begins to strongly impact domestic German developments. The Single Market in itself advances the pace of market change confronting actors and also plays a major role in altering their preferences. It is after this point in time that we begin to see the emergence of increasing returns effects or self-reinforcing mechanisms of change (but also reproduction). These effects are especially observable in the wake of the crucial decision at Maastricht in 1991 – which can be understood as an intensification of the process begun by the Single European Act – to establish monetary union and a single currency. This conjuncture could also be seen as a tipping or ‘flash’ point in that the incremental expansion of financial market internationalization suddenly had much greater determinative force over the German financial system.

Left at this, my explanation could probably be viewed as entirely consistent with the Pierson conception of path dependency, as he suggests that path dependent processes are all based on such a threshold model (2000d: 14, n3) in that a small event or movement acts as the trigger, i.e., pushes cumulative variable above a threshold point that unleashes more dramatic (non-linear) change. And certainly one could construct a plausible argument that the Single European Act (SEA) was a contingent event, since for more than a decade most people had written off any further progress toward European integration.³² But for this kind of path dependent argument to work, one has to assume that in the absence of the triggering event, the cumulative variable would not move above the hypothetical threshold on its own. But I will assert that the internationalization of financial markets – the cumulative variable of interest here – would clearly have continued to cumulate and sooner or later would have come to have the same or similar determinative force over domestic institutional changes.³³ In other words, though the SEA could be seen as a triggering (and possible contingent) event, the pres-

32 Though it would be harder to argue that it was a ‘small’ event or that its observed consequences were unintended by the creators, i.e., it was not a historical accident that it had the effect that it did (as the small, contingent event argument would suggest).

33 In this my argument echoes that of Schwartz (2001: 3) who argues the position that big consequences usually have big (i.e., structural) causes and that small, triggering events have only marginally effects. Though I would not go so far as Schwartz as to argue that without the small causes/big consequences assumption path dependency “morphs” into a typical structural argument. I think that increasing returns effects (self-reinforcing mechanisms) do not automatically follow from a given structural development or change, but in fact can be consciously cultivated by actors in the pursuit of their preferred response to a given structural development or change. Thus, path dependency is not a typical structural (deterministic) argument.

sure of internationalization would have been felt by the German system regardless, perhaps just not quite so soon. Thus, we find evolutionary change within a path that ultimately becomes change to a new path (marked by increasing returns) but without an indispensable triggering, contingent event.

As we shall see below, in the course of the 1990s the increasing returns or path dependency become increasingly apparent and more automatic, reducing the amount of proactive effort (i.e. political lobbying) required of actors to realize these gains (and to convince others to change). I will argue that this is especially true in the wake of a second conjuncture occurring in the late 1990s in which four key events or developments came together:

1. the late 1996 privatization of Telekom,
2. the introduction of the Neuer Markt in early 1997,
3. the internet boom, and
4. the long-anticipated introduction of the Euro. This last conjuncture consolidated the new institutional path of the German financial system and in this sense could be said to demarcate the end of the critical juncture in the switch to a new institutional path.

4.1 A Brief Empirical History

The 1950s and 60s represent the postwar equilibrium phase for the German financial system. The large commercial banks grew and profited primarily from their close association with large industrial firms, though they also begin to rapidly expand retail banking business during the 1960s. While much of German industry was export-oriented, it remained very domestic in its sources of finance. This equilibrium started to erode during the 1970s as a result of domestic market changes. The breakdown is marked by a large shift in market share in commercial lending from commercial banks (including the big three commercial banks – Deutsche, Dresdner and Commerzbank) to the savings and cooperative banks. As can be seen in tables 1a and 1b, in the late 1960s and early 1970s market shares were relatively stable, though with a slight trend toward increased market share by the savings and cooperative banks. Beginning with the 1974 recession, there is a rapid market shift away from the commercial banks during the late 1970s and early 1980s. The shift is particularly stark in the category of industrial loans – long the mainstay of commercial banks and especially the big three banks. The market share of the big three in loans to manufacturing, for example, declined by more than a third within a span of eight years (from 28.4% in 1974 to 18.2% in 1982).

This shift can be attributed to two general endogenous developments. The first is the new aggressiveness of the savings and cooperative banks in commercial lending.³⁴ The large Landesbanks of the savings bank sector became particularly aggressive starting in the early 1970s and aimed directly at taking away business from the large commercial banks. The success of the savings and cooperatives was in good part a result of their ability to draw on a large pool of cheap funds (savings deposits) and thus compete aggressively on loan pricing. The second development fostering the market shift away from commercial banks was the decline in borrowing by large firms that were the primary customers of the big commercial banks. Even though the late 1970s and early 1980s were difficult years and involved extensive economic restructuring, large firms as a whole decreased their dependence on the banking system. This was so because they were able to self-finance at higher rates, in good part because they were able to build huge reserves in their balance sheets that could be used to finance firm investment.³⁵ For example, between 1979 and 1983 the German auto firms made massive restructuring investments yet financed these entirely from their own reserves (Welzk 1986: 93). The share of bank credits in the total working capital of all AGs (the typical legal form of large firms) declined from 16.9% in 1974 to 6.6% in 1984, and in the leading sectors of autos, electronics, and chemicals the decline was even steeper (Welzk 1986: 67).³⁶ Commercial lending by banks was further undermined by many large non-financial firms that were increasingly engaging in banking activities themselves, including lending to other enterprises (Deeg 1999: 85–86).

The decline in bank borrowing by large firms represents an endogenous factor because the reproduction of the existing path of the German financial system depended on a close, capital-based relationship between banks and firms. The corporate strategies of large banks and firms were predicated on this particular relationship. As this relationship began to change, the ability of the system as it was to reproduce itself began eroding. It is also endogenous because in Germany dependence on bank borrowing reflected the preferences of the banks and industrial firms, i.e., it was not dependent on the reproduction of restrictive regulations, as was the case in many “repressed” financial systems such as France or Japan. In

34 For more discussion of this see Deeg (1999: 47–55).

35 While German accounting practices had always been favorable to building reserves, tax law changes made in 1974 which were intended to expand retirement funds for workers further enhanced the ability of firms to build reserves.

36 To be clear, bank debt was not being replaced with either equity or corporate debentures, as equity finance remained very low throughout the 1970s and early 1980s and total corporate bonds outstanding actually declined quite dramatically (Deutsche Bundesbank 1984; also Deutsche Bundesbank 1992).

many of these repressed systems bank borrowing by large firms also declined but as a result of exogenous changes in state policies.³⁷

This rapid decline in commercial lending presented commercial banks, especially the big three, with a major challenge and touched off a search for a new, long-term market strategy. One initial response of the large commercial banks was to lend more aggressively to small and mid-sized firms. While the big commercial banks had some success in this effort, the strength of the savings and cooperative banks in this market segment limited the ability of commercial banks to make this adequate compensation for the decline in large firm business. Thus, by the early 1980s the big commercial banks began to look increasingly to the alternatives left open to them. Unable to find enough growth potential in lending and retail banking, they needed to develop fee-based sources of income. Some of this could come from offering services such as consulting to firms, but the big banks quickly determined that their best opportunities lay in financial activities related to capital markets, most importantly underwriting and trading. This shift in strategy by the banks coincided with the general political turn to neo-liberalism and markets in Germany, as well as a rising concern among banks over growing competition from foreign financial institutions and centers. This concern became quite powerful in the wake of the sweeping liberalization of the London securities industry (the “Big Bang”) and the Single European Act both of which occurred in 1986. Because this is the point in time when the domestic ‘event sequence’ conjoins with the international ‘event sequence’ to create a powerful impetus for change, it can be viewed as the beginning of the critical juncture period in the transformation of the German financial system.

Given these endogenous and now increasing exogenous pressures, the big commercial banks launch a concerted effort in the mid-1980s to promote the development of Germany’s comparatively underdeveloped securities markets because this was now their future. This was to be achieved through financial product innovation and numerous market liberalization efforts. Because Germans investors could not be expected to increase their demand for securities as rapidly as the banks needed,³⁸ the strategy soon came to rest importantly upon wooing foreign institutional investors (Lütz 1998). Consequently, the specific demands of foreign investors became decisive in shaping the subsequent reform agenda of the banks. Despite a firm belief in the effectiveness of the traditional German regulatory regime for capital markets, the pro-reform coalition found itself increasingly compelled to adopt Anglo-Saxon market regulations and norms in order to satisfy

37 I am indebted to Michel Goyer for suggesting this point. For more on repressed financial systems see Lukauskas (1994).

38 Even more painful for the banks was the fact that many German investors bought and sold German securities in foreign markets, especially London.

Table 1a Market Share of Loans to Firms by Bank Group (% of total)

	Commercial Banks	Big Banks ^a	Savings Banks	Cooperatives
1968	35.4	15.7	31.3	12.9
1970	36.2	16.0	32.3	12.3
1972	36.7	15.4	33.2	12.9
1974	35.0	14.9	34.1	13.6
1977	31.8	13.2	34.6	15.1
1982	30.1	11.9	36.7	17.4
1986	27.0	10.7	35.9	16.1

Table 1b Market Share of Loans to Manufacturing Industry by Bank Group (% of total)

	Commercial Banks	Big Banks ^a	Savings Banks	Cooperatives
1968	52.9	28.3	24.6	10.8
1970	54.6	29.6	24.7	10.4
1972	54.2	28.2	26.1	11.3
1974	53.2	28.4	25.8	12.2
1977	48.5	25.1	27.9	14.9
1982	38.8	18.2	33.2	17.5
1986	39.3	18.8	31.8	18.4

^a Big banks are a subset of the commercial bank category. The savings bank and cooperative figures include the respective central and regional banks of these banking groups. Loans to firms include the self-employed and mortgage loans on commercial property.

Source: Deutsche Bundesbank, Statistische Beihefte zu den Monatsberichten der Bundesbank, Reihe 1, Bankenstatistik nach Bankengruppen (various years); and Deutsche Bundesbank, Deutsches Geld- und Bankwesen in Zahlen, 1876–1975. Frankfurt, 1976 (Tables 1.10 and 2.05). Percentages are authors own calculations.

these investors. During the 1980s the Anglo-Saxon approach to capital markets became the internationally dominant one propagated by international regulatory agreements, U.S. pressure, and ultimately the European Union itself through its financial services directives (Deeg/Lütz 2000). Yet it is important to stress that when these exogenous pressures became important in Germany the big German banks were already moving in this direction.

The reform era in Germany kicked off in 1984 with several measures intended to reduce trading costs in Germany and offer the latest financial product innovations, such as zero-coupon and floating rate notes, and interest and currency swaps in deutschmark. The chief movers behind the reforms was a 'Frankfurt Coalition.' The principal actors of this coalition were the big three commercial banks and the DGZ bank (acting on behalf of the savings bank sector), but they also drew steady support from the Land government of Hesse (home to Frankfurt), the association of foreign banks, and with somewhat less conviction, the Bundesbank (Lütz 2001: 211). But developing German securities markets required much more than a few liberalization measures. One of the main challenges confronting the Coalition was – from their perspective – the costly and inefficient structure of the German stock exchange system. While Frankfurt dominated, trading in Germany was fragmented among numerous regional exchanges and exchange regulation was under the purview of the states. Thus in 1986 the Coalition began what turned into a long-term campaign of reorganizing the stock exchange system. Early efforts focused on developing electronic trading as a means to overcome institutional fragmentation. The first such platform, IBIS, came on-line in late 1989. Amendments to the German stock exchange law in 1989 opened the door to trading in futures and options contracts and the opening of the German Futures Exchange in 1990. This same year also saw the passage of the first of three Financial Market Promotion Laws during the 1990s. All of these omnibus laws contained numerous and wide-ranging statutory additions and amendments intended to stimulate the supply and demand of securities. The 1990 law, for instance, eliminated various taxes considered hindrances to securities trading and permitted German investment funds to trade in derivatives. The law also paved the way to the introduction of a short-term commercial paper market in Germany in 1991 (Deeg 1999: 88).

Efforts to develop and promote securities markets in Germany became even more intense and focused in the early 1990s, partly because capital market integration in Europe was now unfolding and banks expected it to accelerate during the run-up to the monetary union planned for 1999. But more importantly the German state itself now took an intense interest in these issues. The state was motivated by the fact that in international negotiations over financial market integration (the Basel Committee, the International Organization of Securities Commissions, and the EU itself) it was severely disadvantaged because it had comparatively little statutory authority and regulatory control over its own securities markets. For these reasons the Germans were frequently shut out of these international cooperation efforts, and they feared that their inability to shape the terms of international financial market integration would severely disadvantage Germany economically (Lütz 1998). Thus in early 1992 the German Finance Ministry launched its Finanzplatz Deutschland campaign (Finance Center Germany), making it clear

that the German government intended to take control of the reigns in the German reform process.

One of the first successes of this campaign was a reorganization of the stock exchange system into a publicly-traded company, the Deutsche Börse AG, in 1993. This was no easy task, as the German states vigorously defended their prerogatives in supervising their own exchanges and feared a loss of influence. The ultimate compromise was messy and complex, but nonetheless succeeded in making Frankfurt the sole focus of stock exchange promotion efforts in Germany. In so doing it set the stage for rapid expansion of securities trading in Germany during the second half of the 1990s.

The second result of this campaign was the Second Financial Market Promotion Law in 1994. The Law harmonized the content and form of German regulation with international norms and EU Directives. It moved Germany away from the traditional self-regulation of securities markets and exchanges with the creation of an independent Federal Supervisory Office for Securities Trading. The new state agency, modeled after the U.S. Securities and Exchange Commission, was charged with enforcing a new legal ban on insider trading and newly stringent information reporting requirements by issuers of securities and traders. The push for greater openness and transparency in reporting by public companies and in the markets represented a dramatic break with the past. It is also a good example of cases in which formal institutional changes are likely to have little real effect unless informal institutions (cultural norms) change as well. As suggested by North, changes in the informal institutions often lag and this has certainly been true regarding German attitudes toward corporate openness and transparency in business deals and market transactions. Over the course of the 1990s, as will be discussed more below, the new norms of transparency and openness clearly spread.

The late 1990s witnessed another slew of reform efforts that extended and expanded upon prior efforts. In early 1997 the Neuer Markt, a new electronic exchange for fast-growing technology firms, was introduced. In 1998 the Third Financial Market Promotion Law was passed. Also in 1998, an equity issues law (*Kapitalaufnahmeerleichterungsgesetz*, KapAEG) was promulgated which allows German firms to balance their books using the international (IAS) or American accounting standards (US-GAAP). Use of these standards will increase transparency of company finances and thus give them greater access to foreign capital markets and investors (Lütz 2000).

The late 1990s became the time when many of the reform efforts of the 1980s and early 1990s finally congealed and began to have a significant impact on the behavior of financial firms, large corporations, and German retail investors. The pe-

riod from late 1996 to 1999 can be viewed as a second key conjuncture of events that fully consolidated the institutional transformation process. It can therefore also be understood as marking the end of the critical juncture period during which the direction of institutional change was uncertain. It was during this time when the benefits of a decade's worth of reforms finally began to pay off for those who had invested so much in the new capital market-oriented path. From this conjuncture forward the momentum behind the new path appears unstoppable.

By the end of this critical juncture it is bank-large firm relations that have undergone the greatest amount of transformation. In general, the fabled tight links between banks and large firms in Germany have significantly weakened. To put it in more theoretical terms, the gains from coordination have been eroding and along with this the ability of the old path to sustain itself. Relationship banking, i.e., a mutual emphasis on a long-term relationship between a firm and its Hausbank(s) is being replaced by more market-based, transaction-oriented exchanges (Deeg 1999). Large German firms have sought and achieved a high level of financial and managerial autonomy and banks compete with increasing intensity for their business. This change was fed further by more general changes in the managerial strategies of many large German firms. For example, in the 1990s several large German firms moved toward internationalizing their investor base (and capital sources), and thus weakening domestic shareholder control and bank connections, by listing on the New York Stock Exchange. Thus, through going abroad, but also through attracting inward investment by foreign institutional investors, the shareholder base of numerous large German firms has become more widely dispersed and internationalized. Like the US, institutional investors (e.g., pension funds and investment funds) have become increasingly important in Germany.³⁹

The internationalization of the investor base of many large German firms (and the big three commercial banks too) is connected to a growing emphasis by such firms on shareholder value, i.e., managing the company so as to maximize return on equity (which manifests itself in share prices and dividends).⁴⁰ In the past,

39 Between 1990 and 1998 the investment funds' share of all German shares rose from 4% to nearly 13%. But much of this investment is concentrated in a relatively small number of large firms (Jürgens et al. 2000: 4). Siemens is a good example of such changes: Between 1982 and 1996 the value of Siemens' shares held by insurance companies, investment funds and banks more than doubled while other categories remained largely unchanged; the value of shares held by *foreign* insurance companies, funds, and banks nearly quadrupled in the same period (www.siemens.com/en/investor_relations).

40 Firms indicate their commitment to shareholder value by, among other things, adopting U.S. or International accounting standards, introducing share options for managers, making public explicit profitability targets, and issuing quarterly reports.

German firms often focused more on expansion of the firm's revenues and market share while profitability, though important, was not the driving force of managerial decisions. This conventional focus was sustained by the fact that most large firms have been controlled by a core of long-term, stable shareholders who, while wanting a return on their equity investment, did not usually pressure management to place profit maximization as the foremost goal.

The growing emphasis on shareholders (which as much about informal – cultural – as it is about formal institutional change) is also being promoted by legal and regulatory changes. For example, the 1998 Law on Control and Transparency in Enterprises (*Gesetz zur Kontrolle und Transparenz im Unternehmensbereich, KonTraG*) allowed German corporate managers to buy back up to 10% of their own shares, a technique commonly used in the US by managers to boost share price. Closely tied to this are the newer regulations permitting firms to pay their managers with share options, again a widespread practice in the US but previously unknown in Germany. These reforms also encourage increased openness and information about how firms are being managed. In this kind of shareholder-oriented environment takeovers, including hostile ones, become more likely.⁴¹ Corporate managers also face more pressure to sell-off divisions or close operations more quickly than they would have in the past if they are not generating sufficient return. This raises questions about whether other stakeholders, especially employees, will have less influence over the firm than in the past (Höpner 2000; Jürgens et al. 2000).

On the other side of the ledger, since the late 1970s large German banks have become increasingly interested in reducing their equity holdings in large nonfinancial firms. First, the banks were interested in reducing their exposure to the risks associated with large equity stakes in other firms.⁴² Second, like other large German firms, the banks are increasingly focused on maximizing their own returns on equity and believe that many of their long-held equity investments “locked up” in traditional relationships could be more profitably employed in other ways.

Roughly two-thirds of the DAX-30 firms have adopted some or all of these measures (Jürgens et al. 2000: 15).

41 In 1995 a voluntary takeover code was adopted by the German financial community. In 2000, following the hostile takeover of Mannesmann by Vodafone, the German government initiated a move toward a statutory code.

42 The new approach is nicely illustrated by the example of DB Investor, a subsidiary set up in 1998 by the Deutsche Bank (the Dresdner Bank did something similar) to manage all of its industrial holdings. For DB Investor this means pressuring managers of firms in which it holds equity stakes to boost profits; it means selling equity stakes as soon as it can be done profitably; and it also means buying equity stakes that promise to yield significant profits through resale within a short period, i.e., less than four years (*The Economist*, 14 August 1999; *New York Times*, 13 August 1999).

In 2000 the Federal Government passed tax law changes that will make the sale of long-term equity stakes held by large firms and banks in other firms tax free.⁴³ It is widely expected that, once these measures take effect in 2002, a large-scale restructuring of the German corporate world will begin as large banks and firms sell off big chunks of equity that they presently hold in each other. The anticipated consequences of this tax change are tremendous, ranging from an increase in the depth and liquidity of equities markets to a much more open, Anglo-style capitalism. This new direction represents a fairly radical break from the old path in which banks and other large firms were long-term shareholders providing “patient” capital and protecting firm management from unwanted outside influences (not to mention takeovers).

Along with reducing their holdings, banks have been curtailing their traditional role in corporate governance, i.e., the institutions and practices that regulate or control firm managers. In 1974 banks held 20% of the supervisory board seats in the 100 largest firms; by 1993 this percentage had shrunk to 6.3% (Lütz 1999). Bankers have also greatly reduced the number of supervisory board chairs that they control. The KonTraG law from 1998 also introduced greater restrictions on the ability of banks to influence firms through the proxy votes they control.⁴⁴ All of the above changes mean that banks are playing much less of a monitoring role in large German non-financial firms, i.e., creating managerial stability but also ensuring accountability. This role is being taken over by the market. The relationship between large German firms and banks is increasingly similar to that which is typical of Anglo-Saxon capitalism: Firms shop for the best deal and the most competent bank for a given need and do not automatically turn to their Hausbank as in the past. In this sense the financial and industrial systems in Germany are “decoupling.”

4.2 The Role of Self-Reinforcing Mechanisms

Although far too brief, the above overview of institutional change provides a framework for discerning many of the self-reinforcing mechanisms described by Pierson. *Set-up costs* play an important role in fostering the development of the

43 Notably, the tax repeal even surprised business leaders, as it had not been a major part of tax reform discussions. The best speculation is that Chancellor Schröder, Finance Minister Eichel and a few others inserted this proposal into the reform package in bold (and furtive) effort to force the “modernization” of the German economy. Another is that they inserted it without realizing the potential magnitude of its impact, but once in the open it was seized upon by the media and big business and could no longer be swept back under the rug (see Lang / Mayhew / Shackelford 2001).

44 A bank that owns more than 5% of another firm’s equity may no longer automatically vote the shares in that firm held on deposit in the bank.

new institutional path, as predicted. During the 1980s the big banks developed their skills and capacities for increased securities market-related activities mostly through large internal investments (expanded trading facilities, retraining personnel, establishing new or expanded offices in foreign financial centers, etc.). But by the end of the decade it became clear that this investment approach was simply too cautious and that German banks, if they were to pursue this new market strategy consequently, needed to make a qualitative leap. Thus in 1989 Deutsche Bank purchased a leading British investment bank (Morgan Grenfell). The WestLB followed with the purchase of the European Operations of Standard Charter in 1990; the Dresdner finally followed suit in 1995 with the purchase of yet another UK investment bank (Kleinwort Benson).⁴⁵ Over the course of the 1990s all the major German bank groups – including those in the savings and co-operative sector – have made very large investments in the requisite technology, organizational changes, and human capital for securities-related business (Deeg 1999: 90). It is worth noting that the costs of these investments were not simply monetary; there were also psychic costs and many individual costs stemming from the debates and struggles within individual bank organizations and associations over the reallocation of resources from commercial to investment banking. There can be little doubt that these huge investments intensified the interest of the banking system in the rapid expansion of a German-based securities industry.

Learning effects are also clearly evident. In the late 1980s and for much of the 1990s the major German banks struggled in many ways with their new strategy. The Deutsche Bank, for example, frequently spent huge sums buying the best investment banking talent it could in London and New York. Yet many of these people frequently departed in short order, as they did not fit into a bank that was still strongly shaped in its internal organization and management approach by traditional commercial banking. Only in the last couple of years has it become clear that investment banking is now the definitive paradigm within the bank and thus shaping its internal organization and managerial approach (Pretzlik 2000). In other words, it took a good decade for German bankers to learn how to think (not just act) like investment bankers. Along the way, the Deutsche Bank (along with many other German banks) had its lunch eaten for many years by the big British, Swiss and American investment banks, notably in the mergers and acquisitions market segment (Deeg 1990: 111–112). This was especially hurtful, since M&A is one of the most lucrative investment banking activities and one the German banks have desperately wanted to succeed in, both in Germany and in international deals. Yet again, in the last few years the big German banks have finally begun to gain some competitiveness.

45 German banks also bought several U.S.-based financial institutions, including Bankers Trust by Deutsche Bank.

We also find *coordination effects* to be significant and quite essential to the development of the new German path. In the German case one can identify three axes of coordination which greatly facilitate the new path. The first axis is among the three major banking groups and individual banks. The goal of developing securities markets and benefits to actors who engage in them grow as other actors pursue this goal. While the increased attention to securities business by more and more banks increases competition among them, it has the effect of stimulating the growth of securities markets since each bank and banking group attempt to foster demand for their securities-related products and services. The second axis is between the suppliers and buyers of securities and capital market services, i.e., between investors and issuers. That a balanced expansion of supply and demand is not automatic is readily evidenced by the fact that the growth of retail investment in shares by Germans – a key benchmark for the new strategy (and path) – did not really take-off until the second half of the 1990s or roughly a decade after concerted reform efforts were initiated.⁴⁶ Once demand began growing rapidly all the previous reform efforts ensured that the system could supply it. The surprisingly rapid growth of the Neuer Markt is the prime example of this effect.⁴⁷ The third axis of coordination is that between market and political actors. During the 1990s key political actors (in the state and political parties) came to adopt the banks' capital market reform agenda as their own (Lütz 1998, 2001). As more and more political actors came to believe that Germany's economic success would increasingly depend on a more capital-market oriented economy, the pace and ease of reforms picked up. Since coming to power in late 1998, the current center-left government has demonstrated a clear commitment to this path, thus ensuring that there will be relatively little significant political opposition to further movement along the new path.

Adaptive expectations are also in evidence. We see this first in the debates within the savings and cooperative banking sectors during the 1980s and early 1990s. Each of these groups contained within it many actors with varying commitment and interest in developing the capital market-related capacities of the group as a whole. Generally, the larger banks (and national association leaders) within each group were most in favor of the development of securities markets and the ca-

46 From 1997 to the middle of 2001 the number of Germans owning shares or mutual funds rose from 5.6 million to 13.44 million (i.e., 140%). In western Germany 22.5% of adults now own shares or mutual funds (in eastern Germany the figure is 15.4%). Despite the market crash in late 2000 and 2001, this number continued to grow (although investors clearly preferred mutual funds over direct share ownership) (Deutsches Aktieninstitut 2001).

47 From 1983 to 1996, an average of 16 companies went public *each year*; in 1998, 78 firms went public and 1999, 167 firms went public; the vast majority did so on the Neuer Markt (Hutter / Leppert 2000).

capacity of the savings and cooperative banks to compete successfully in these activities. But this required significant collective action since it involved investing group resources in specific organizations and activities. One controversial – and still ongoing – reform push within each group was to merge the larger regional banks within each group in order to create fewer and bigger banks that could command the resources to compete effectively in an increasingly capital market-oriented and globalized economy (Deeg 1999: 58–67). But changes within each group were driven forward by the generally undisputed belief that securities business would be ever more important and that they must be successful there too if they were to survive.⁴⁸ Adaptive expectations are also quite evident in the arguments used by German reformists throughout the 1990s; namely, that Europe and the world were all moving toward greater market control and capital markets and, therefore, Germany must do likewise if it is to remain competitive (Lütz 1998).

Finally, as noted earlier we find evidence of substantial increasing returns effects being generated by coordinated and correlated changes in a wide range of complementary institutions that together configure the financial system in the broadest sense.⁴⁹ In other words, the push to develop capital markets reaches far beyond changes in financial product regulation or the structure and supervision of the stock exchanges. It encompasses myriad changes in personal and corporate tax laws, as well as changes in corporate laws, ranging from those covering shareholder voting rights to accounting regulations to the use of stock options and stock repurchases. The three Financial Market promotion laws are the perfect embodiment of this positive feedback mechanism, as each contained a large number of new and amended laws covering numerous policy areas but all intended to foster the development of capital markets.

Finally, there is little question that the exercise of power and legitimacy have been central to the cultivation of increasing returns. Market actors, together with political actors, repeatedly deployed their political influence to achieve reforms. The push for reform was typically wrapped in an argument about the need to maintain German international competitiveness. Supporting my contention that increasing returns needed to be cultivated, at least in the initial phases, is the fact that the payoffs from early reforms were not that great. To fully realize these returns reformists needed to achieve a critical level of institutional changes before

48 Importantly, both groups were relatively profitable during this period and were so largely because of their traditional retail and commercial business. Thus, investing resources in securities-related capacities was as much or more about future expectations than current market imperatives.

49 One example of this is the fact that the introduction of private pensions in Germany became a feasible policy option only after securities markets became more developed; in turn, the introduction of private pensions (with state subsidies) in 2002 will be provide a big boost for further development of securities markets.

the “take-off.” Thus we find a decade and a half of continuous reform before there are enough accumulated changes on the demand and supply sides of the capital markets that the returns to the new path start pouring in.

Earlier it was suggested that increasing returns mechanisms were also operative in reproducing key institutional elements of the old path. Much of this took the form of institutional layering or “patching up” (on this concept see Genschel 1997). Concretely, what we observe is the successful extension (or “shoring up”) of the institutions and logic of the old path as they apply to the vast majority of small and medium-sized firms. In contrast to the relationship between banks and a growing number of large firms, the relationship between banks and smaller firms remains more firmly rooted in long-term, lending-based relationships. For example, during the 1980s and 1990s, numerous regulatory reforms were adopted with the intent of encouraging SMEs to go public, but these efforts met with relatively little success (at least until very recently). Instead, German SMEs continue to rely heavily on conventional bank loans (Bundesbank 1998: 35). There are several reasons for this, a primary one being the reluctance of SME owners to give up control over their firms. Also, accessing capital markets is usually more costly for smaller firms than bank loans, all the more so because German SMEs have been well served by a highly efficient commercial loan market (Sauvé/Scheuer 1999). Since German SMEs have been reluctant to go public, but nonetheless were confronted with declining equity levels since the 1970s, German banks and policy-makers satisfied this need to a considerable degree by “patching up” the old system through establishing and expanding the regulatory basis for private equity companies (*Kapitalbeteiligungsgesellschaften*). These companies have grown steadily since the early 1980s and played an important role in rebuilding eastern Germany as well.

While these firms are often referred to as venture capital firms, and many do focus on investing in technology-intensive firms, they have acted very differently from their US counterparts. Through the mid-1990s German equity investments overwhelmingly focused on established companies in established sectors, rather than high-tech startups (Deeg 1999).⁵⁰ All the banking groups, but especially the commercial and savings banks, operate these investment companies. To further assist SMEs adjust to the changing demands of world markets, starting in the 1980s all the banking groups also greatly expanded their management consulting services for SMEs, providing them with market analysis, export assistance, investment analyses, etc.

50 Along with the rise of the “New Economy” and the internet boom in the late 1990s, the amount of funds invested by private equity funds in Germany grew dramatically. In the course of this expansion, many of these funds became true venture capitalists, investing heavily in high-tech sectors and start-ups (Franke 2001).

5 Meet the New Path – Same as the Old Path?

So, what is so different about the current German financial system from the old? Is it truly a new path? Skeptics could rightly point to the fact that much of the German financial system appears to be unchanged.⁵¹ There are still three banking groups engaged in group competition. The vast majority of firms (generally SMEs) still rely on an updated and robust bank-based system, and even many large firms appear to be resisting the spread of the shareholder-equity culture. Germans still own shares at a rate far lower than the “equity-oriented” nations. Many large firms are still in the hands of insiders and there are both formal and informal pieces of the stakeholder corporate governance approach still firmly in place.

These facts are all undeniably correct. But as suggested at the beginning, the new German path is not completely different from the old one. The new path of the financial system encompasses elements of the bank-based system and those of the new market-oriented system. The new path or model is a hybrid. Nonetheless, it is also, in my view, a new institutional path or trajectory for the many reasons discussed in the paper that I summarize now.

First, the process of institutional reform and change since the mid-1980s is a path dependent one, since it is clearly propelled by increasing returns or positive feedback effects. It is a new path because, following Thelen, it involves a process of change which accommodates the logic (indeed, even retains pieces of it) of the old path but one that does not move along the same track. Further evidence of path dependence is found in the fact that a return to the old bank-based system has become increasingly remote, if not now impossible (at least for the major banks and largest firms). Moreover, the existence of positive feedback mechanisms suggests that institutional change along the new path will continue. Thus, while skeptics can rightly find much to suggest that the extent of change has been exaggerated, path dependence suggests that what we have seen is just the beginning.

Second, as North convincingly argues, change should be evident in the higher-order rules or institutions, both formal and informal. Even our cursory review of the reforms makes clear that the institutional changes in the German financial system are both sweeping and of the highest order. The big banks’ strategy of developing capital market-related business could not be pursued effectively within the institutional framework existing in the early 1980s. Thus they began an effort to rewrite the “rules of the game” itself, and, aided and abetted by political actors, have done so extensively. Demonstrating changes in informal or cultural institu-

51 For example, see Vitols (2000).

tions is trickier and I have not attempted to systematically assess them here, but the anecdotal evidence in the popular and business presses, annual reports of corporations, speeches of business and political leaders alike, and the rapidly changing behavior of individual German investors is quite strong: it provides at least indirect evidence that German attitudes toward equities and the “equity culture” have changed dramatically. The subjective mental models and perceived interests of nearly all actors have undergone substantial and relatively rapid changes in recent years.

Third, a new logic has taken hold of the financial system. The strategies of all the banks (and many other actors) have shifted toward the development of capital markets as the cornerstone of their future expansion. The corporatist, negotiated approach of financial market actors to problem solving and new situations is giving way to a more competitive, conflictual and, somewhat ironically, state-led approach (Lütz 2001). The logic of the insider system of corporate governance has been superseded by the logic of a market-dominated, outsider system. While this new logic encompasses a relatively small number of firms, they are among the very largest and most influential in Germany. Thus the qualitative impact of these changes is much greater than some numbers alone suggest. Moreover, there are already numerous indications that the new logic is spreading in the realm of small and medium-sized firms as a growing number of both “new” and “old” economy firms turn to equity market finance.

In summary, the case of German finance yields five general lessons for the theory of path dependence and which can inform research on institutional change. The first is that there can be positive feedback mechanisms in a process of institutional change even when it does not begin with a contingent, “small event.” Increasing returns can follow big events too (e.g., SEA) and ones that were not necessarily contingent but functioned as intended by creators (e.g., the privatization of Telekom). But this is a path dependent process in the sense that with each event in the sequence the probability of going back to a situation in which capital markets were minor and bank intermediation predominated is less and less likely. A second and closely related lesson is that increasing returns mechanisms can also facilitate the movement from one path to another, and not just stabilize a new path once initiated.

Third, the German case also suggests that increasing returns effects may not be automatic. Instead they may require “cultivation” by actors in that they must continue to accrue institutional changes such that some form of tipping point is reached and the returns from the new path can be realized and captured by actors. Fourth, the case showed that the end of one path and transition to another can be initiated by developments endogenous to the old path, i.e., it is not necessarily the case that an exogenous force must disturb an equilibrium before a path

change can occur. When a path switchover occurs gradually as a result (as least partially) of endogenous factors and without a contingent, triggering event, then there may be no obvious event or point in time when institutional change was no longer on-path but off-path change. Indeed, it may be that it is only possible to determine retrospectively and with considerable lag time that there has been off-path change, i.e., a change to a new path.

Finally, I have used the German case to develop and illustrate a concept of 'path' that rests on the notion of an institutional logic, i.e., that a path is defined by the logic (predictable strategies, routines and shared decision rules) generated through the operation of a given institution or institutional system. While this conceptualization could (and inevitably will) be improved upon, I believe it advances the debate over path dependence by providing at least an initial, intersubjectively applicable conceptualization of a path which can be applied in analyzing any set of institutional changes.

6 References

- Clemens, Elisabeth S. / James M. Cook, 1999: Politics and Institutionalism: Explaining Durability and Change. In: *Annual Review of Sociology* 25, 441–66.
- Czada, Roland, 2001: The German Political Economy in Flux. Unpublished paper. <<http://www.fernuni-hagen.de/POLOEK/Flux.pdf>>
- Deeg, Richard, 1999: *Finance Capitalism Unveiled: Banks and the German Political Economy*. Ann Arbor: University of Michigan Press.
- , 2001: Path Dependence and National Models of Capitalism: Are Germany and Italy on New Paths? Paper presented at the Annual Meeting of the American Political Science Association, August 30–September 2, San Francisco.
- Deeg, Richard / Susanne Lütz, 2000: Internationalization and Financial Federalism – the United States and Germany at the Crossroads? In: *Comparative Political Studies* 33, 374–405.
- Deutsche Bundesbank, (various years): *Statistische Beihefte zu den Monatsberichten der Bundesbank. Reihe 1: Bankenstatistik nach Bankengruppen*. Frankfurt a.M.: Deutsche Bundesbank.
- , 1976: *Deutsches Geld- und Bankwesen in Zahlen, 1876–1975*. Frankfurt a.M.: Deutsche Bundesbank.
- , 1984: Business Finance in the United Kingdom and Germany. In: *Monthly Report of the Deutsche Bundesbank* 36(11), 33–42.
- , 1992: Longer-Term Trends in the Financing Patterns of West German Enterprises. In: *Monthly Report of the Deutsche Bundesbank* 44(10), 25–39.
- , 1998: Entwicklung des Bankensektors und Marktstellung der Kreditinstitutsgruppen seit Anfang der neunziger Jahren. In: *Monatsbericht* 50(3), 33–64.
- Deutsches Aktieninstitut, 2001: Zahl der Aktionäre und Besitzer von Aktienfondsanteilen. DAI-Kurzstudie 3 / 2001.
- Edwards, Jeremy / Klaus Fischer, 1994: *Banks, Finance and Investment in Germany*. Cambridge: Cambridge University Press.
- Franke, Dirk, 2001: Beteiligungsmarkt vor der Konsolidierung. In: *Die Bank*, September / 2001, 664–666.
- Genschel, Philipp, 1997: The Dynamics of Inertia: Institutional Persistence and Change in Telecommunications and Health Care. In: *Governance* 10(1), 43–66.
- Hall, Peter, 1986: *Governing the Economy: The Politics of State Intervention in Britain and France*. Oxford: Oxford University Press.
- Hall, Peter / David Soskice, 2001: *National Varieties of Capitalism*. Cambridge: Cambridge University Press.
- Höpner, Martin, 2000: Kapitalmarktorientierte Unternehmensführung: Messung, Bestimmungsgründe und Konsequenzen. Paper presented at First Annual Meeting of the Research Network on Corporate Governance, Berlin, June 23–24.
- Hutter, Stephan / Michael Leppert, 2000: Stock Offerings in Germany. In: *Corporate Finance*, May / 2000, 26–29.

- Jacoby, Wade, 2000: *Imitation and Politics: Redesigning Modern Germany*. Ithaca: Cornell University Press.
- Jürgens, Ulrich / Joachim Rupp / Katrin Vitols, 2000: *Corporate Governance and Shareholder Value in Deutschland*. WZB Discussion Paper FS II 00-202. Berlin: Social Science Research Centre Berlin.
- Lang, Mark H. / Edward L. Mayhew / Douglas A. Shackelford, 2001: *Bringing Down the Other Berlin Wall: Germany's Repeal of the Corporate Capital Gains Tax*. Unpublished manuscript, January 2001.
- Lütz, Susanne, 1998: The Revival of the Nation-State? Stock Exchange Regulation in an Era of Globalized Financial Markets. In: *Journal of European Public Policy* 5, 153-169.
- , 2000: From Managed to Market Capitalism? German Finance in Transition. In: *German Politics* 9, 149-170.
- , 2001: Der Staat und die Globalisierung von Finanzmärkten: Regulative Politik in Deutschland, Großbritannien und den Vereinigten Staaten. Habilitationsschrift. Hagen: FernUniversität Hagen.
- Lukauskas, Arvid J. 1994: The Political Economy of Financial Restriction: The Case of Spain. In: *Comparative Politics* 27, 67-89.
- Mahoney, James, 2000: Path Dependence in Historical Sociology. In: *Theory and Society* 29, 507-548.
- North, Douglass C., 1991: *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.
- Pierson, Paul, 2000a: Not Just What, but When: Timing and Sequence in Political Processes. In: *Studies in American Political Development* 14, 72-92.
- , 2000b: Increasing Returns, Path Dependence, and the Study of Politics. In: *American Political Science Review* 94, 251-267.
- , 2000c: The Limits of Design: Explaining Institutional Origins and Change. In: *Governance* 13, 475-499.
- , 2000d: *Big, Slow-Moving, and ... Invisible: Macro-Social Processes in the Study of Comparative Politics*. Conference Paper. Comparative Historical Analysis Workshop, November 10-11, 2000 in Cambridge, MA.
- Porter, Michael, 1992: Capital Disadvantage: America's Failing Capital Investment System. In: *Harvard Business Review* 70, 65-82.
- Pretzlik, Charles, 2000: Ackermann Signals a New Era. In: *Financial Times*, 21 September 2000.
- Regini, Marino, 2000: Between Deregulation and Social Pacts: The Responses of European Economies to Globalization. In: *Politics and Society* 28, 5-33.
- Sauvé, Annie / Manfred Scheuer (eds.), 1999: *Corporate Finance in Germany and France*. Frankfurt a.M / Paris: Deutsche Bundesbank / Banque de France.
- Schwartz, Herman, 2001: *Down the Wrong Path: Path Dependence, Markets, and Increasing Returns*. Unpublished manuscript. Charlottesville: University of Virginia.
- Shonfield, Andrew, 1965: *Modern Capitalism. The Changing Balance of Public and Private Power*. London: Oxford University Press.

- Soskice, David, 1999: Divergent Production Regimes: Coordinated and Uncoordinated Market Economies in the 1980s and 1990s. In: Herbert Kitschelt et al. (eds.), *Continuity and Change in Contemporary Capitalism*. Cambridge: Cambridge University Press.
- Thelen, Kathleen, 1999: Historical Institutionalism and Comparative Politics. In: *Annual Review of Political Science*, Vol. 2. Palo Alto, CA: Annual Reviews Inc., 369–404.
- , 2000: Timing and Temporality in the Analysis of Institutional Evolution and Change. In: *Studies in American Political Development* 14, 101–108.
- , forthcoming: How Institutions Evolve: Insights from Comparative-Historical Analysis. In: James Mahoney / Dietrich Rueschemeyer (eds.), *Comparative-Historical Analysis: Innovations and Theory and Method*. Draft chapter for inclusion, forthcoming.
- Vitols, Sigurt, 1995: *German Banks and the Modernization of the Small Firm Sector: Long-Term Finance in Comparative Perspective*. WZB Discussion Paper FSI 95-309. Berlin: Social Science Research Centre Berlin.
- , 2000: *The Reconstruction of German Corporate Governance: Reassessing the Role of Capital Market Pressures*. Conference Paper. First Annual Meeting of the Research Network on Corporate Governance, Berlin, 23–24 June 2000.
- Welzk, Stefan, 1986: *Boom ohne Arbeitsplätze*. Cologne: Kiepenheuer & Witsch.
- Ziegler, Nicholas, 2000: Corporate Governance and the Politics of Property Rights in Germany. In: *Politics and Society* 28, 195–221.
- Zysman, John, 1983: *Governments, Markets, and Growth*. Ithaca: Cornell University Press.
- , 1991: How Institutions Create Historically Rooted Trajectories of Growth. In: *Industrial and Corporate Change* 4, 243–283.